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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/622,778

07/21/2003

Nelson Bonilla

45479

4247

7590

06/28/2005

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EXAMINER

DANG, ROBERT TRONG

ART UNIT

PAPER NUMBER

2838

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,778

Applicant(s)

BONILLA ET AL.

Examiner

Robert T. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/09/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>04/21/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending Application No. 10/434101 in view of Bonilla et al 6697238.

As to claims 1 and 15, application No. 10/434101 discloses in claims 1 and 7 a protection device having line and load terminals between conductive paths comprising of a latching mechanism adapted to close or open a connection between the line and load terminals. It also discloses an alarm indicator, adapted to provide indication that the device is not providing ground fault protection. However, application 10/434101 does not disclose the use of a fuse adapted to blow when the latching mechanism fails to open during a manual test of the protection device. Bonilla teaches a protection device that includes a fuse

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adapted to blow when the latching mechanism fails to open during a manual test of the device (see col. 9, lines 55-58). It would've been obvious to one of ordinary skill in the art at the time the invention was made to modify the protection device and add a fuse as taught by Bonilla as a safety measure in the event the device is improperly wired.

As to claims 2 and 16, claim 8 of copending Application No. 10/434101 discloses a protection device wherein the alarm indicator is a light emitting diode.

As to claims 3 and 17, claim 9 of copending Application No. 10/434101 discloses an LED that flashes red to indicate the device is not providing ground fault protection.

As to claims 4 and 18, claims 3 and 6 of United States Patent No. 6697238 discloses a visual indicator extinguishing as a result of a blown fuse, which renders the device useless in terms of providing ground fault protection.

As to claims 5 and 19, claim 9 of copending application No. 10/434101 discloses an LED that flashes red to indicate the device is not providing ground fault protection.

As to claims 6 and 20, claim 21 of copending Application No. 10/434101 discloses a protection device having line and load terminals between conductive paths comprising of a latching mechanism adapted to close or open a connection between the line and load terminals. Furthermore, it also discloses a sensing circuit adapted to selectively place the latching mechanism in said second state upon detection of a ground fault condition to electrically isolate said face terminals from said source and load terminals.

As to claims 7 and 21, claim 22 of copending Application No. 10/434101 discloses a protective device comprised of a ground fault circuit interrupter.

As to claim 8, claim 23 of copending Application No. 10/434101 discloses a protective device wherein said source terminals and load terminals are adapted to connect to a power source.

As to claim 9, claim 24 of copending Application No. 10/434101 discloses a protective device wherein said latching mechanism comprises of an electromechanical device, adapted to place said latching mechanism in one of said first and second states. It also discloses a first and second transformer for the purposes of detecting a current imbalance and an amount of current imbalance in said conductive path respectively.

As to claim 10, claim 25 of copending Application No. 10/434101 discloses a protective device wherein electromechanical device comprises of a solenoid.

As to claim 11, claim 26 of copending Application No. 10/434101 discloses a protective device wherein first state comprises a closed conditions and second state comprises of an open condition.

As to claim 12, claim 27 of copending Application No. 10/434101 discloses a protective device wherein said latching mechanism is in second state, face terminals are isolated from the power source if said power source is connected to either load terminals or said load terminals.

As to claim 13, claim 28 of copending Application No. 10/434101 discloses a protective device wherein said face terminals include contacts separate from conductive paths and said source and load terminals.

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As to claim 14, claim 29 of copending Application No. 10/434101 discloses a protective device, where the conductive paths comprises or a neutral conductor, adapted to connect said source and load terminals; and a hot conductor adapted to connect said source and load terminals.

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawings must be reasonably free from erasures and must be free from alterations, overwriting, interlineations, folds, and copy marks. See figures 1,4,6,9,10,12-16,17a, 18a, and 18b. The drawings have a line quality that is too light to be reproduced (weight of all lines and letters must be heavy enough to permit adequate reproduction) or text that is illegible. Reference characters, sheet numbers, and view numbers must be plain and legible).

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

2. The drawings are objected to because they fail to show what device 11 is, as described in the specification. See page 7 line 1 of the specification. Also, figure 12 is described in the specification as a perspective view; however, figure 12 in the drawings is depicted as a schematic view. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

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avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: On page 7 line 19, of the specification it is understood that the latching plate corresponds to item 54, referenced in the drawings; however, line 23 of the same page discloses the latching plate being associated with item 58. Furthermore, the details of reset button mentioned on page 7 lines 25 are referenced to item 30 in figures 4 and 11-12 of the drawings. In accordance with the drawings, item 30 corresponds to a test button. Also, on page 11, lines 8-13, the details being about the latching mechanism 46, test button 30, solenoid 50, load terminal 37,

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and line terminals 39-40 are not depicted in figure 1 as it says it is. It is understood that figure 1 is a perspective view of the device and not a schematic diagram illustrating an example of the circuitry of the ground fault circuit-interrupting device. On page 13, line 3 of the specification the latching plate is referenced to numeral 53 when it should be referenced to numeral 153. Pages, 15,16, and 17 of the specification are missing. Appropriate correction is required.

Claim Objections

Claim 2 is objected to because of the following informalities: Claim 2 lacks antecedence. For examination purposes, claim 2 is taken to depend upon claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Claims 1-3, 5-8, 11 and 14-17 are rejected under 35 U.S.C. 102 (b) as being anticipated by Finlay et al (6522510).

As to claims 1-3, 5,15-17 and 19, Finlay discloses in figure 1 a protection device's circuit having load and line terminals, and a latching mechanism (120) to establish or eradicate electrical continuity between the line and load terminals (see col. 2, lines 30-37). Finlay also discloses in figure 1 a schematic of a GFCI circuit with an alarm indicator consisting of an LED (140) to provide visual indication on the status of the GFCI. The specification also discloses that the LED is used to indicate (see column 5, line 5-8) the GFCI device is not providing appropriate ground fault detection. When the GFCI device is defective, the LED will illuminate red to indicate that it is not providing ground fault protection (see col. 5, lines 27-30). In figure 3, there is a test button (130) that is used to simulate

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a ground fault condition where a fuse (F1) blows when the latching mechanism fails to open during the depression of the test button.

As to claim 6, which is dependent upon claim 1, Finlay discloses in figure 1 a sensing circuit (L1&L2) adapted to place interrupt mechanisms (120) in an open state upon detection of a ground fault condition to electronically isolate face terminals from said source and load terminals.

As to claims 7-8, Finlay discloses in figure 1, a "GFCI" device adapted to be powered through either source or load terminals. The invention summary also discloses how the power sources are connected variously through the GFCI (see col. 4, lines 1-2 and col. 4, lines 13-14).

As to claim 11, Finlay discloses in figure 1, interrupting mechanisms (120) being open and closed.

As to claim 14, Finlay discloses in figure 1 a protective device wherein conductive path comprises of hot and neutral conductors designed to connect to both line and load terminals.

As to claim 20, which is dependent upon claim 15, Finlay discloses in figure 1 a sensing circuit (L1&L2) adapted to place interrupt mechanisms (120) in an open state upon detection of a ground fault condition to electronically isolate face terminals from said source and load terminals.

As to claim 21, Finlay discloses in figure 1, a "GFCI" device adapted to be powered through either source or load terminals.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finlay et al (6522510) in view of Bienwald et al (5202662) as applied to claim 1 above.

As to claim 9, which is dependent upon claim 1, Finlay discloses a GFCI device employing an electromechanical device, adapted to place the latching mechanisms in one of said closed and open states. The latching mechanisms open and close as a result of a current imbalance that is sensed by transformers (L1&L2) in figure 1. It is clear as stated in the specification that transformer L1 is a differential transformer that senses the amounts of current flowing in the hot and neutral conductors. However, Finlay does not mention what transformer (L2) does. Bienwald discloses in his specification and figure 1, a protective device that is comprised of two transformers (91&33); one that detects a current imbalance and the other to identify the amount of current imbalance in the hot and neutral wires (see col. 5, lines 41-62 & col. 4, lines 32-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made add the first

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transformer as taught by Bienwald. One would be motivated to do this in order to detect a completion of a neutral to ground circuit at the load.

As to claim 10, Finlay discloses that the electromechanical device is comprised of a solenoid (see col. 3, lines 44-49).

Claims 12&13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finlay et al (6522510) in view of DiSalvo (6246558).

The Finlay reference discloses all the limitations as applied to claim 1 above. Finlay discloses a GFCI device in figure 1, consisting of line, load, and face terminals connected between a conductive path with a circuit interrupting mechanism (120) that is used to establish to eradicate electrical continuity between said line, load, and face terminals. The circuit also includes a sensing circuit comprised of a differential transformer utilized to open the interrupt switch (120) due to a ground fault condition being facilitated (see column 3, lines 45-49). Although the face terminals are electrically isolated from the line and load terminals due to the opening of interrupt mechanism (120), they each do not have separate contacts and are connected to the load terminals as shown in figure 1. However, DiSalvo's invention teaches in figures 2-6, that face terminals (66&86) have contacts separate from line and load terminals. When contact arms (50&70) are closed, contacts (52,62) touch contacts (56,66) respectively, and contacts (72,82) touch contacts (76,86) respectively. This action will provide power to the load and face terminals. In the event contact arms (50&70) open the connection in the conductive paths, all terminals will lose power. It would have been obvious to one of ordinary skill in the art at the time the invention was made

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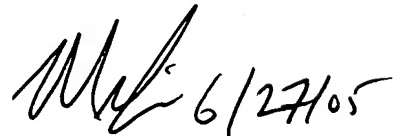
to modify the sharing of load and face terminal contacts of Finlay with separate contacts as taught by DiSalvo. One would have been motivated to this based on his teachings of inadvertently powering the face receptacles should the GFCI be ever be miswired.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert T. Dang whose telephone number is 571-272-8326. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'M. Sherry', followed by the date '6/27/05'.

MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

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